REMARKS

Rejections under 35 USC §102(b)

Claims 1, 3, 4, 7, 9, 11, 12, 15, 17 and 18 were rejected under 35 USC §102(b) as being anticipated by Bruening et al. (U.S. Patent No. 5,120,443).

Claim 1 has been amended to recite "wherein said elution step comprises a step of bringing the washing-treated resin into contact with an aqueous solution consisting of water and thiourea, or with a first aqueous solution consisting of water and thiourea and then a second aqueous solution consisting of water and hydrochloric acid successively." The description of the present specifiction shows that an aqueous solution consisting of water and thiourea functions as an excellent eluting solution (for example at pages 16-18).

According to Bruening et al, the aqueous recovery solutions shown in the Example 7 are 0.1 M HCl and 5 M NH_4 Cl. Bruening et al also discloses recovery solution of 1M thiourea plus 0.02M $TiCl_3$ plus 0.1M HCl and another aqueous recovery solution of 4M $(NH_4)_2SO_4$ in Example 9. Also, it discloses 1M thiourea plus 0.1M hypophosphorous acid in Example 11, and 1M thiourea plus 0.1M NaH_2PO_2 plus 0.1M HCl in Example 12. It should be noted that none of the examples uses aqueous solution consisting of water and thiourea as an eluting solution. Thus, all eluting solutions shown in Bruening et al include at least one ingredient other than thiourea.

Thus, Bruening et al does not teach or suggest the "third step of eluting the PGM from the washing-treated resin to form an effluent, wherein said elution step comprises a step of bringing the washing-treated resin into contact with an aqueous solution of thiourea or hydrochloric acid solution, or with the aqueous solution of thiourea and then the hydrochloric acid solution successively."

Moreover, it should be noted that, in Bruening et al, the adsorbent (stationary phase) used for the separation of metals is different from that used in the present invention. As described in claim 1 of Bruening et al, the adsorbent is a polyalkylene-polyamine-containing ligand covalently bonded to a **solid inorganic support matrix**. For example, in Example 1 of Bruening et al., a silica gel is used as the solid inorganic support matrix.

On the other hand, in the present invention, the adsorbent is a polyamine-based anion exchange **resin** in which a polyamine type ion exchange group is introduced into a resin (i.e., an organic polymer and not a solid inorganic material). This difference in base material of the adsorbent brings the difference in the method for eluting the metals from the adsorbent.

Further, it should be noted that in the present invention, Pt, Pd, Rh, Ir and Ru can be collected from the adsorbent into the eluate. In contrast, Bruening et al does not discloses collection of Pt and Pd although it discloses that Rh, Ir and Ru are separately collected from the adsorbent into the eluate (see Examples 7 and 9). Thus, complete separation of these metals is not achieved in Bruening et al.

For at least these reasons, claim 1 patentably distinguishes over Bruening et al. Claims 3, 4, 7, 9, 11, 12, 15, 17 and 18, directly or indirectly depending from claim 1, also patentably distinguish over Bruening et al for at least the same reasons.

Rejections under 35 USC §103(a)

Claims 2, 6, 10 and 14 were rejected under 35 USC §103(a) as being obvious over Bruening et al. (U.S. Patent No. 5,120,443) in view of EP 1,167,555 (EP'555).

Claims 2 and 6 depend from claim 1. EP '555 is cited for allegedly disclosing matters relevant to ORP of 700 to 1100 mV as in claim 2, and EP '555 is also alleged to disclose that HCl solution has a chloride ion concentration of 4 mol/L or more as in claim 6. Such disclosures, however, do not remedy the deficiencies of Bruening et al discussed above.

For at least these reasons, claims 2 and 6 patentably distinguish over Bruening et al and EP'555. Claim 10, depending from claim 2, and claim 14 depending from claim 6 also patentably distinguish over Bruening et al and EP'555 for at least the same reasons.

Claims 8 and 16 were rejected under 35 USC §103(a) as being obvious over Bruening et al. (U.S. Patent No. 5,120,443) in view of Ji et al. (U.S. Patent No. 6,660,059).

Claim 8 depends from claim 1. Ji et al has been cited for allegedly disclosing that elution effluent is made alkaline and then heated to recover the PGM in the form of sulfide. Such disclosure, however, does not remedy the deficiencies of Bruening et al discussed above regarding claim 1.

For at least these reasons, claim 8 patentably distinguishes over Bruening et al. Claim16, depending from claim 8, also patentably distinguishes over Bruening et al and Ji et al for at least the same reasons.

Claim 19 was rejected under 35 USC §103(a) as being obvious over Bruening et al. (U.S. Patent No. 5,120,443)

Claim 19 depends from claim 1, which patentably distinguishes over Bruening et al. Claim 19 patentably distinguishes over Bruening et al for at least the same reasons.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
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